

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: SKATUTAKEE, LAKE	Lake Area (ha): 105.58
Town: HARRISVILLE	Maximum depth (m): 6.2
County: Cheshire	Mean depth (m): 2.9
River Basin: Merrimack	Volume (m <sup>3</sup> ): 3044500
Latitude: 42°56'15" N	Relative depth: 0.5
Longitude: 72°04'30" W	Shore configuration: 1.67
Elevation (ft): 1202	Areal water load (m/yr): 23.91
Shore length (m): 6100	Flushing rate (yr <sup>-1</sup> ): 8.30
Watershed area (ha): 4532.5	P retention coeff.: 0.46
% watershed ponded: 9.4	Lake type: natural w/dam

BIOLOGICAL:

23 January 1989

22 August 1988

DOM. PHYTOPLANKTON (% TOTAL) #1	DINOBRYON 35%	ASTERIONELLA 40%
#2	ASTERIONELLA 25%	TABELLARIA 20%
#3	TABELLARIA 25%	
PHYTOPLANKTON ABUNDANCE (cells/mL)		1645.0
CHLOROPHYLL-A (µg/L)		9.44
DOM. ZOOPLANKTON (% TOTAL) #1	KERATELLA 50%	KELLICOTTIA 29%
#2	KELLICOTTIA 19%	NAUPLIUS LARVA 25%
#3		KERATELLA 17%
ROTIFERS/LITER	85	81
MICROCRUSTACEA/LITER	13	79
ZOOPLANKTON ABUNDANCE (#/L)	105	161
VASCULAR PLANT ABUNDANCE		Scattered
SECCHI DISK TRANSPARENCY (m)		2.4
BOTTOM DISSOLVED OXYGEN (mg/L)	11.4	7.7
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		< 10
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None

CHEMICAL:Lake: SKATUTAKEE, LAKE  
Town: HARRISVILLE

	23 January 1989		22 August 1988		
DEPTH (m)	1.5	3.0	1.0		4.0
pH (units)	6.3	6.1	6.5		6.4
A.N.C. (Alkalinity)	2.0	1.9	2.6		2.4
NITRATE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.53	0.62	0.41		0.44
TOTAL PHOSPHORUS	0.011	0.010	0.016		0.018
CONDUCTIVITY ( $\mu$ mhos/cm)	37.0	33.9	34.3		34.0
APPARENT COLOR (cpu)	12	13	24		24
MAGNESIUM			0.54		
CALCIUM			1.7		
SODIUM			3.1		
POTASSIUM			0.50		
CHLORIDE	4	4	4		4
SULFATE	6	6	5		5
TN : TP	48	62	26		24
CALCITE SATURATION INDEX			4.2		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1988

D.O. S.D. PLANT CHL TOTAL CLASS

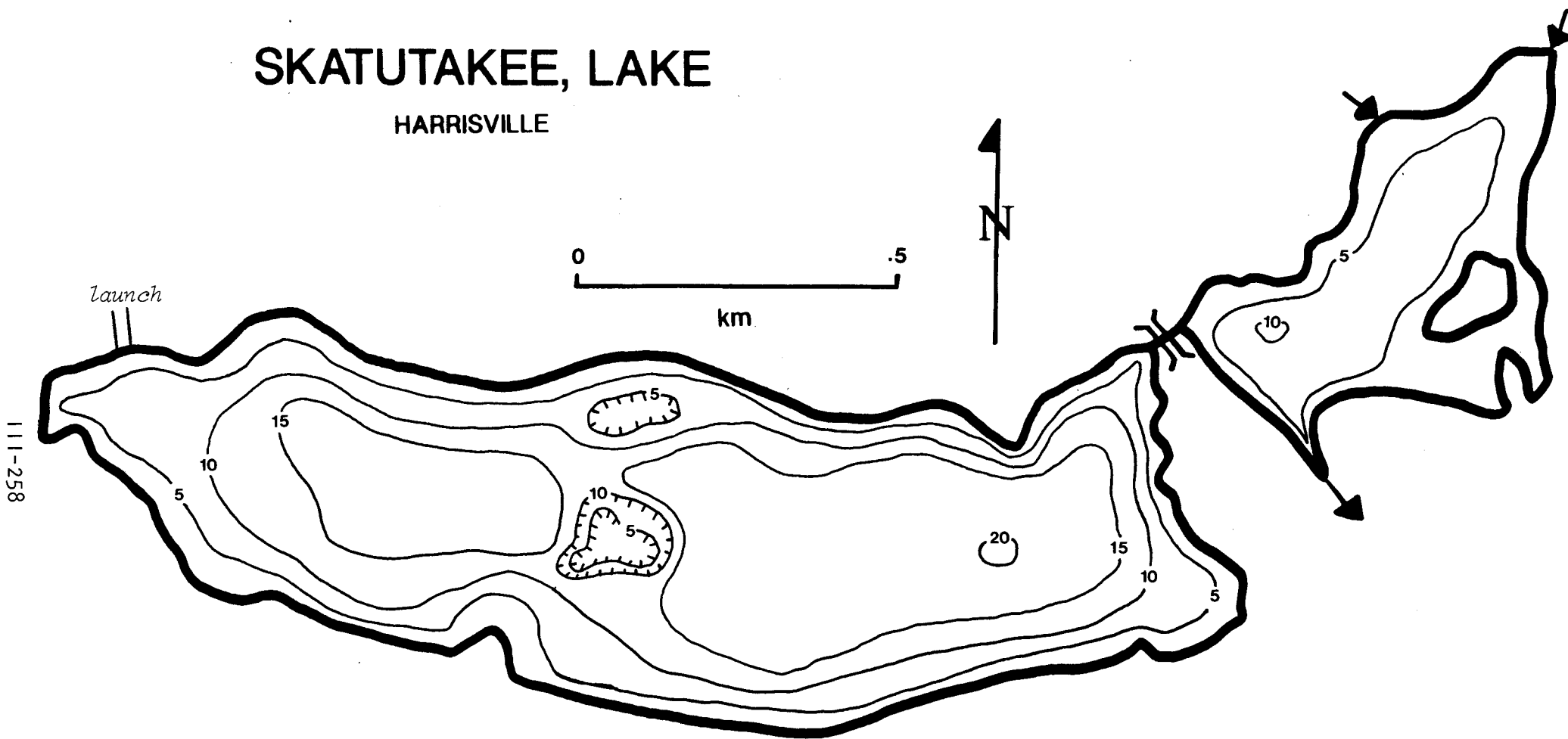
**	3	1	2	6	Meso.
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COMMENTS:

1. Previously known as Harrisville Pond.
2. The algae level was somewhat high, although not excessive; however, species were present that gave the water a putrid odor.
3. Chrysochromulina (55%) was the dominant whole-water phytoplankton genus, and its class, golden algae, was the dominant class (55%).
4. Lake was previously surveyed in 1976; there was no change in trophic classification.

# SKATUTAKEE, LAKE

HARRISVILLE



Rough Bathymetric Chart  
WSPCD - 1988  
sounded by fathometer

5 ft. isobaths

# FIELD DATA SHEET

LAKE: SKATUTAKEE, LAKE                      TOWN: HARRISVILLE  
DATE: 08/22/88                      WEATHER: OVERCAST, COLD, BREEZY

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[illegible]

SECCHI DISK (m): 2.4

COMMENTS:

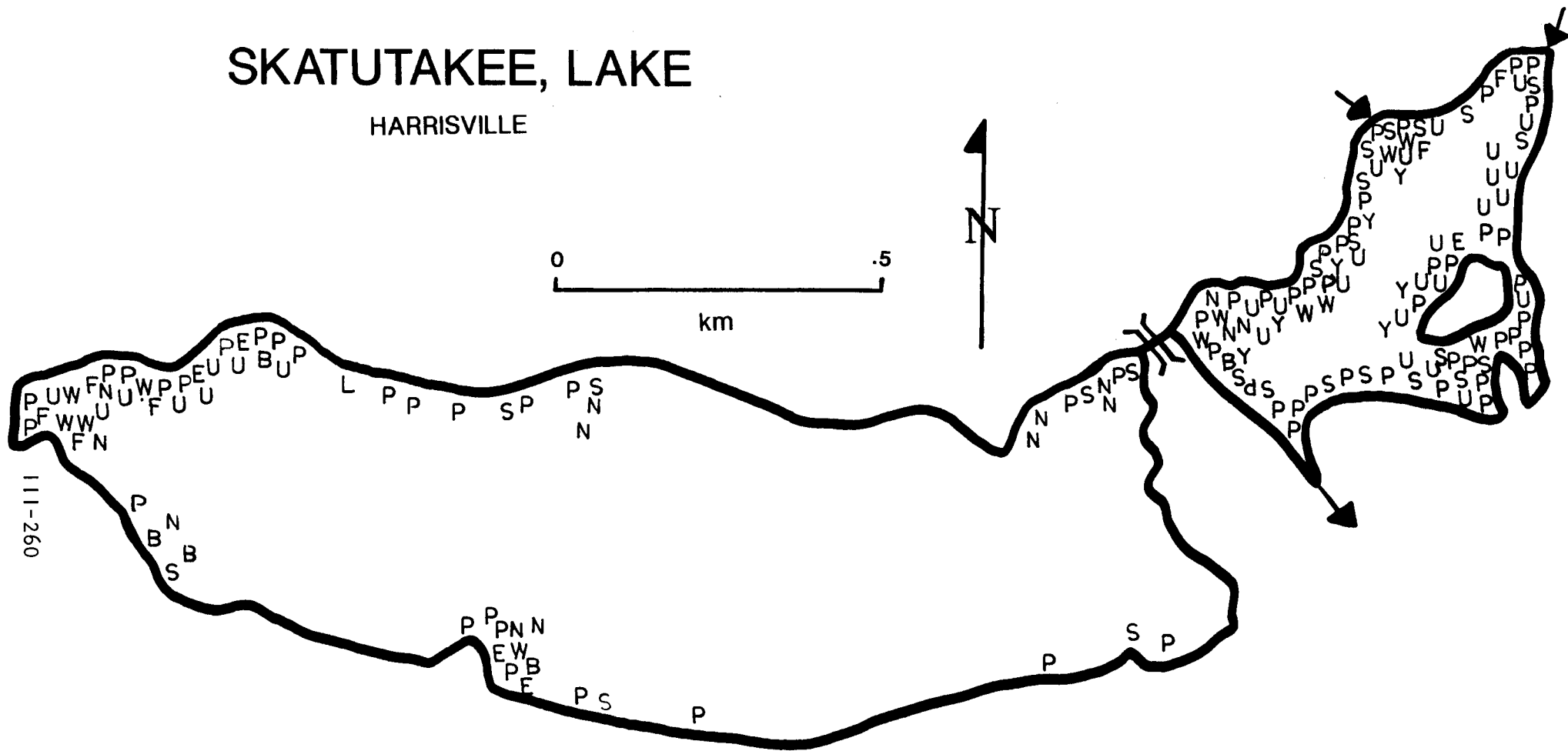
BOTTOM DEPTH (m): 5.3

TIME: 1315

\*Dissolved oxygen values are in mg/L

# SKATUTAKEE, LAKE

## HARRISVILLE



AQUATIC PLANTS  
22 AUG. 1988

[illegible]